

WHAT IS CLAIMED IS:

1. A frame joining structure for electrical and electronic equipment housing cabinets, wherein ends of outer side surfaces of three mutually orthogonal frames, which constitute a framework of an electrical and electronic equipment housing cabinet, are shaped to be cut at two planes of  $\pm 45^\circ$  relative to a plane defined by other two frames, and these ends are joined together to constitute a corner portion.

2. The frame joining structure according to claim 1, wherein a corner member is provided in the corner portion to be covered by the ends of the outer side surfaces of the three frames.

3. The frame joining structure according to claim 1, wherein the ends of the outer side surfaces of the three frames are constituted by a trigonal pyramid shaped corner member outwardly exposed.

4. The frame joining structure according to claim 1, wherein obliquely extending draining portions (5) are provided on both sides of the outer side surfaces of the three frames, and the draining portions are joined together at the corner portion.

5. The frame joining structure according to claim 2, wherein obliquely extending draining portions (5) are provided on both sides of the outer side surfaces of the three frames, and the draining portions are joined together at the corner portion.

6. The frame joining structure according to claim 3, wherein obliquely extending draining portions (5) are provided on both sides of the outer side surfaces of the

three frames, and the draining portions are joined together at the corner portion.

5 7. A bar-shaped frame for electrical and electronic equipment housing cabinets, which constitutes a framework of an electrical and electronic equipment housing cabinet and comprises a hollow portion or portions and orthogonal, plate-shaped equipment mount sides connected to the hollow portion or portions.

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8. The frame according to claim 7, wherein the plate-shaped equipment mount sides are extended from a cabinet inside corner portion (B8) of a hollow portion.

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9. The frame according to claim 7, wherein the hollow portion is triangular in cross section, and draining portions are provided on both outer wall sides of a cabinet to abut obliquely against the outer wall sides of the cabinet.

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10. The frame according to claim 7, wherein the plate-shaped equipment mount sides are formed with equipment mount holes, inside of which is circular and outside of which is quadrilateral.

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11. The frame according to claim 9, wherein a formed side is provided to be contiguous to a draining portion (B9) and in parallel to the cabinet outer wall.

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12. A vertical frame for supporting outer walls of an electrical and electronic equipment housing cabinet, wherein a frame body is provided with draining sides (C6, C7), which abut obliquely against the outer walls, and formed sides (C4, C5) disposed further inward than the draining sides and in parallel to the outer walls.

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13. The vertical frame according to claim 12, wherein the draining sides are provided on the right and the left, and an oblique side is provided therebetween to distend outward.

14. A frame joining structure for electrical and electronic equipment housing cabinets, wherein ends of frames (1) are joined together at a corner portion of an electrical and electronic equipment housing cabinet by means of welding and fasteners.

15. The frame joining structure according to claim 14, wherein at least a part of a frame inner side portion of the frame further inwardly of the cabinet than portions abutting against a door, side panels, a roof or the like is joined by welding (D17), and at least a part of a frame outer side portion of the frame further outwardly of the cabinet than the abutting portions is joined by fasteners.

16. The frame joining structure according to claim 14, wherein at least a part of a frame inner side portion of the frame further inwardly of the cabinet than portions abutting against a door, side panels, a roof or the like is joined by fasteners and at least a part of a frame outer side portion of the frame further outwardly of the cabinet than the abutting portions is joined by welding (D17).

17. The frame joining structure according to claim 14, wherein the frames comprise a hollow portion or portions and a recessed portion, and the recessed portion is secured by a rivet or rivets, which are one kind of fasteners.

18. The frame joining structure according to claim 15, wherein the frames comprise a hollow portion or portions and a recessed portion, and the recessed portion is secured

by a rivet or rivets, which are one kind of fasteners.

19. The frame joining structure according to claim 17,  
wherein the recessed portions (D5) are formed in a frame  
5 inner side portion and a frame outer side portion,  
respectively.

20. The frame joining structure according to claim 18,  
wherein recessed portions (D5) are formed in a frame inner  
10 side portion and a frame outer side portion, respectively.

21. The frame joining structure according to claim 17,  
wherein the recessed portion (D5) formed on the frame outer  
side portion serves as a draining portion and is secured at  
15 a bottom portion thereof by a rivet or rivets and welded  
(D17) at side walls thereof.

22. The frame joining structure according to claim 18,  
wherein the recessed portion (D5) formed on the frame outer  
20 side portion serves as a draining portion and is secured at  
a bottom portion thereof by a rivet or rivets and welded  
(D17) at side walls thereof.